

ABSTRACTSPEECH PROCESSING SYSTEM

5 A speech processing system is provided which is operable  
to receive sets of signal values representative of a  
speech signal generated by a speech source. The system  
is operable to determine a measure of the quality of the  
speech signal by performing a statistical analysis of the  
received sets of signal values. The system stores data  
10 defining a predetermined function derived from a signal  
model which models the speech source and which defines a  
probability density function which gives, for a given set  
of model parameters, the probability that the signal  
model has those model parameters given that the signal  
15 model is assumed to have generated the received set of  
signal values. The system applies a current set of  
received signal values to the stored probability density  
function and then draws samples from it using a Gibbs  
sampler. The system then analyses the samples to  
20 determine a measure of the variance of some of the  
samples and then outputs a signal indicative of the  
quality of the received speech signal values in  
dependence upon the determined variance.